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ABSTRACT

The effort to institute minimum competency testing (MCT) is nearly universal despite the need tc debate its basic definitions, implications, and consequences beforehand. There are seven distinct reasons for the MCT movement: (1) legislative zeal; (2) unfavorable allegations by local and national press; (3) economic accountability; (4) the "bandwagon" effect; (5) end result of management by objectives; (6) declining test scores; (7) the need for educational reform. While every state is at least considering MCT, programs from state to state show wide variations. The need appears to be pressing, but a number of issues should first be presented, understood, and accepted. Should the test measure life skills or school skills? What are the basics? With what should we measure? When should the test be given? Who will set the standards? Should the test be minimum or maximum? What should be done to help those who fail? Who will pay the cost? Will the test re-segregate? Will curriculum reform be necessary? How much time will be given for phase-in (the time between when the requirement to pass a MCT is instituted and the actual test is given)? Who will be accountable for failures? What are the legal ramifications? In the Springfield Public Schools, the use of the MCT for identifying underachievers is questionable since the Districts's CTBS testing program (California Test of Basic Skills) already serves the purpose for a reasonalby large number of ninth graders. In conclusion, the MCT debate is centered not at standard setting, but rather at the evaluation of those to whom the standard is applied. (Author/CP)

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MINIMUM COMPETENCY TESTING (MCT)

Some Remarks

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Minimum Competency Testing (MCT): Some Remarks

Dr. John F. Howell

I. Introduction

Nothing spurred the movement toward the "New Math" like the hysteria following the advent of Sputnik. Those who failed to implement the "New Math" were almost made to feel unpatriotic or at least unprofessional as educators. Such massive implementation was done without adequate research, the very consequenses of which seem so self-evident today. In 1972 Peter Doe sued San Francisco schools for failing to teach him to read despite giving him a diploma. Did Peter Doe launch another Sputnik?

Today we are rushing pell-mell into MCT, again without adequate research. William Spady of the National Institute of Education wrote in January, 1977, that the basic definitions and analyses of the implications and consequences of MCT were badly needed. The basis on which some very major decisions are being made are extremely thin. There has been no research that I know that has systematically ascertained the incompetencies of adults holding a high school diploma.

Why then is the rush to institute MCT so nearly universal? I believe there are seven distinct categories of reasons for the current race to begin MCT.

1. There has been considerable pressure placed on the educational system by courts and legislators, pressure in desegregation, pressure in special education, and so forth. It seems like a logical extension of such actions to legislate some sort of "quality control" on the product. Then, when everyone is talking about education, lawmakers can claim to have done something about it. Unfortunately, as H. A. Wilson of National Assessment (NAEP), puts it, "The guaranteeing of meaning of a high school diploma by legislating some minimum competency test is awfully simplistic!"

2. Unfortunately education during the last decade has had a very poor press. The polls indicated that public confidence in education as an institution is slipping. Perhaps MCT movement can help restore confidence. Basically there are two allegations that surface frequently; one is that students are leaving high school with a diploma that means nothing except that they attended, the other is that graduates cannot read and write adequately. A HEW Publication 74-1613 reported that one million children aged 12 to 17 cannot read on a fourth grade level. The report also disclosed that 15% of all such Black children are functionally illiterate as are 14% of all such poor children.

Gordon Cawelti, Executive Director of the Association for Supervision and Curriculum Development, recently pointed to a University of Texas study of adults in which one out of five lacked necessary skills to cope with their environment.

A report by the American Association of School Administrators cited the following data supporting the need for MCT:

a. In 1975, 12.6% of the 17-year-olds tested by the National Assessment of Educational Progress (NAEP) were unable to read at a "minimally adequate" level. NAEP found that the problem of illiteracy was most severe among Blacks; only 58.4% of the Black 17-year-olds tested, contrasted with 91.8% of white youth, could attain the minimal level.

b. The feelings on many as exemplified by the comments of a teacher: "By far the greater number of the young people we teach in our progressive system do not know how to read, spell, write, use correct grammar, do simple math, remember, use logic."

c. Popular Reports that: 18 million adults cannot read well enough to file application for Medicaid, Social Security benefits, bank loans or driver's licenses or that only about half of the nation's 17-year-olds and adults can solve typical consumer problems.

d. "Educational malpractice" suits have been filed in a least four states. In one of the suits, the superintendent reportedly acknowledged that it was possible to get a diploma with only fourth-grade reading skills "if you are supposing a youngster with very limited intellectual capacity."

Such data, hardly rigorous research, needs to be carefully examined before reaching the conclusion that an MCT program is the answer.

3. The third reason for MCT is that the rising cost of education has made local bond issues and other educational financing especially difficult. School boards are demanding accountability in ever more numerous instances. MCT might insure the value of the diploma. At best it may very well serve to focus attention on creating the efficient use of school system's resources.

4. Then there is the bandwagon effect. At the end of 1976, 16 states had either passed or were considering some MCT action. Near the end of 1977 the number had risen to 33. As of this date there may be no state that is not at least considering some form of MCT. William Safire, reporting in the Union on December 8, 1977, noted that the stated policy of the US Government was to encourage states to mandate MCT.

5. For the last decade educational experts, especially evaluators, have been advocating the use of well defined objectives in educational programs. Educators have been urged to adopt a management by objectives system to streamline the educational operation. Proficiency testing is but the

logical extension of that thrust, defining in measurable terms the objectives implied by a diploma.

6. Sixth; perhaps the most salient argument for a MCT program has been the Test Score Decline experienced in college entrance testing. Ignoring some of the probable causes of such a decline, the generalization was easily made that all high school graduates must be reading and writing at a lower level. This may be true, but all high school graduates do not take college entrance examinations. There is some evidence that scores in the skill areas of reading and writing have declined for all students since reading writing and computing have been replaced by television, telephone, and hand held calculators. Coleman was not the first to point out the amount of variance due to home effects.

7. Lastly, there does seem to be a general climate for school reform. Perhaps the meaning of a high school diploma needs to be examined philosophically. There is a general movement for reform in school finance, in student discipline, in special education, in bilingual education. But in all of these areas we need to carefully define terms. We need to deliberately consider implications. We need to pay close attention to all of the possible consequences. The National Counsel of Teachers of English recently (12-5-77) called for an end to legislatively mandated MCT on the grounds that "few assumptions about MCT have been substantiated in practice, theory, or research!"

II. Overview

Minimum competency testing is not a new idea. The tests of General Educational Development (GED) have been used since 1942 to enable persons over 18 and out of school to obtain a high school diploma. The tests measure reading, mathematics, writing, and the interpretation of charts and graphs. There are some who would advocate giving the GED examination for high school graduation.

The first state to legislate MCT was Oregon which began a program of competency examinations in life-skill areas. Each locality had the option of deciding how much, if any, credit would be given to passing such tests as a basis for graduation along with time and credit.

Few state programs imitate the example set in Oregon. Most states that have passed MCT legislation have suggested or mandated tests of basic skills, tests of reading, writing, and computing. Arizona, for example, requires all graduates to pass a Grade Nine Reading Level test. Delaware has suggested that achievement tests be given regularly in many grades and that promotion be based on the results.

California has adopted an "early out" system which implies that the MCT is also a maximum competency test. Students who are sixteen and have passed the tenth grade can take the examination and if successful can leave. Over 40% of the students who took the test as an early out option passed it. Three quarters of those who passed left saving the State of California $4.7 Million in addition to what local districts saved. All students will have to pass the test for graduation by 1980.

Florida has used a functional literacy test as a graduation requirement. The Adult Performance Level (APL) test was recently used in West Palm Beach with 8% of the anglo students failing. However, 56% of all of the minority students who took the test failed it.

Pennsylvania has begun a five year study program prior to beginning any systematic testing program.

Denver, Colorado, which has been using a local proficiency test since 1960, consistently reported that between 20-35% of their students, which are reasonably heterogeneous culturally, failed the test in Grade 9. However, only about 1.5% of the students are denied a diploma due to failing the test. No details were available about those students who are denied a diploma because

they are not around to take the test.

Minitowoc, Wisconsin has adopted a rather unique (for public schools) approach in that students can elect to try and pass a course by taking essentially the final examination. If successful, they would obtain credit for the course toward graduation and be free to take some elective or to accelerate their educational progress. Thus, the diploma would be based on a series of course ending examinations, all of which would constitute a form of MCT.

While there is much activity among the states to enact some MCT programs, the examination of those programs from state to state show wide variations. Already there are cries in Washington for a national MCT law. Leading the charge is Senator Pell from R. I., Representative Mottl from Ohio, and Admiral Rickover.

III. Issues

There are a number of issues that need to be presented, understood, and accepted before any MCT Program can be instituted with confidence of success. The first issue deals with the distinction between life skills and school skills. William Spady of the National Institute of Education defines competency as the life skills necessary to perform life-situation tasks. School skills are the abilities underlying competency, such as reading, writing and computing. Graduates may be able to demonstrate great school skill on an examination but be unable to balance a checkbook. Should the MCT be a test of school skill or life skills? If it is to be a test of school skill, what insures the successful solving of life's problems? If it is to be a test of life skills, what preparation does a student receive for such a test in school other than acquiring basic school skills?

The second issue revolves around the question as to what is basic. Professor Arthur Foshay of Columbia University has suggested that there are four basic competencies: Coping skills such as language, mathematics, science and the like; Character skills involving honesty and ethics; Citizenship skills

needed to competently exercise the responsibilities within a democracy; and Private Realization skills not the least of which may be earning a living. All the reading skills in the world may not produce a good citizen, fully enjoying both his occupation and avocation, dealing honestly and thoughtfully with other adults around him/her. These skills, Foshay contends, may be much more "basic" to competent living than those basics now narrowly defined.

How are life skills or school skills to be measured? The best way to measure life skills is to examine over a reasonable length of time the adult functioning of the high school graduate, but the cost is very great in terms of time and energy. The best way to measure school skills is to administer a test of the prerequisite skills in reading, mathematics, science, social studies, and whatever. The problem arises in making the transition assumption that life effectiveness is a result of training in school skills. H. A. Wilson of National Assessment of Educational Progress cautions, "The potential for tragic test abuse is nowhere higher than in the area of MCT because of the direct impact on a student's future". Great care must be taken in directly linking low school skills with low life skills or great school skills with life success; experience has already shown that such links are only mildly related.

When is the best time to test students for MCT? Some suggest before entering high school while others suggest at the end of the senior year. Some even suggest a year-to-year examination for promotion. Testing in Grade 9 for graduation skills means testing over material taught in Grades 1-8. Are then students who pass the examination in Grade 9 competent? Can the elementary and junior high schools be held accountable for those who do not pass in Grade 9? Testing in Grade 12 is as Chris Pipho of NAEP says, "a last minute knock over the head" leaving very little room for recovery. Testing at Grade 9 must be

limited to school skills testing while that at Grade 12 limited to life skill testing. How does one remediate a failure to be competent in the twelfth grade?

One of the most controversial issues revolves around the question as to who is going to set the standard. Shall it be the federal agencies, state departments, school committees, administrations, or local parent consortiums? If the minimum standards are to reflect the community that is to be served, then there is some sense that the standards ought to be set by a representative group of consumers of the educational product in the community. It makes more sense for the local school administration or local school committee to set graduation standards since they have the responsibility for the educational system in that community. When state or local agencies set graduation standards there is the danger, as William Shine, Superintendent of Cherry Hill, NJ schools, puts it, "that such assessment is political assessment of schools, not a diagnosis of educational needs". Many states, like Oregon, allow each local community to determine the extent to which state guidelines shall be used as a requirement for graduation.

The next issue is perhaps the hardest issue for me to deal with conceptually. Let us consider that you are about to teach a course. You would traditionally expect to teach that course for 180 days and at the end of that time you would expect to have the achievement of the students somewhat normally distributed as reflected in your final grades for the course; a few "A"s, a few "F"s, more "B"s and "D"s, and perhaps the most marks being "C". Now let us assume that you wanted to design a test that you could give to some student who, if the student passed, could be excused from the course. Where would you "peg" the test? At the "D" level where some students who actually took the course ended yet passed? At the "A" level indicating complete mastery of the material

that you covered? Perhaps you might consider the "C" level as sort of a compromise. What then is a MCT? It is the very least that you can expect anyone to know about a subject? Does the very least that is possible to know constitute competency?

Most mastery tests that allow students to be excused from all or part of a course are aimed at a reasonably high level of achievement. They measure what the average or above average student should know at the end of a course but allow the time spent in learning it to vary, usually toward the lower or less time end. Is it right to expect all students to attain the mastery level of achievement on a MCT when by attending they could pass with substantially less? Do we establish Criterion Referenced Levels for each of our courses that together form the basis for graduation? In short, when does the minimum become a maximum and the maximum the minimum?

Gordon Cawelti of ASCD noted in Education USA on 3-28-77 that few communities that have considered MCT have even begun to deal with the problem of what to do with those who fail the examination. Henry Brickell from the Academy for Educational Development suggests that we had better provide many opportunities for students to pass a MCT because it may prove unaffordable, both economically and politically, to not award diplomas to a sizeable segment of the senior class. Aside from given many opportunities to pass, some have suggested remediation, especially if the test is given in Grade 9 or earlier. Yet the test may measure skills that appear in the high school curriculum to which the students have not yet been exposed. Or the MCT may be a school skills test of reading and mathematics computation given at some level such as Grade 8. As Denver discovered, a rather large body of ninth graders had some difficulty with the test at that level. Remediation classes in high school in reading and mathematics computation do not appear to hold great appeal and may actually

hasten students terminating their education. Even at the junior level, a large number of students may have difficulty as reported by Newsweek (1-9-78) of a Florida high school in which 4 out of 10 students failed. H. A. Wilson has also pointed out that short term remediation, as would likely be given in order to pass a MCT, has very little lasting effect and most certainly would not contribute to adult competency. It might even be that studies of adult incompetency may contain deficiencies attributable to lack of practice rather than incompetency. And Gordon Cawelti has also pointed out that grade retention has had very little positive effect on achievement and some poor effect on social development. Thus, almost any course of action taken to help those who fail seems frustrated. Some creative and effective solutions are desperately needed in this area.

The cost of entering a MCT may be more than a school budget would allow. Some estimates range from $1.50 to $2.00 or more per child. Testing all of the students in a given grade in Springfield would cost about $3000. Add to this the cost of multiple testing opportunities and the cost of remediation or whatever. None of these costs may be reimbursable by the state.

Perhaps the most challenging issue is that of resegregation. The evidence so far suggests that minority students fail a MCT more frequently than non-minority students. In West Palm Beach, Florida, 56% of the minority students tested failed the examination while only 8% of the Anglos failed. Is it just a coincidence that the MCT movement began when the desegregation movement was reaching its height? Is the MCT movement a means to "protect" the "standards" threatened by desegregation? Here, perhaps, is the greatest challenge to the legal aspects of MCT. The evidence strongly suggests that the potential for resegregation through MCT is very great. While the testing itself may not have been engaged to discriminate between students, the judge in

"Washington v Davis" noted that a person is presumed to have intended the natural consequences of his deeds. Thus, if we know that a MCT will racially discriminate students, then great care must be taken to insure that the test given adequately reflects the cultural pluralism existing in our community. This may well be the greatest hurdle for MCT developers. The problem facing students with special needs or who do not speak English is of course a close rival.

Few of us would welcome the opportunity of being tested in a subject of bio-psychology. I would guess that no one here has ever seriously studied bio-psychology. We all would feel very put upon to have to pass a test in bio-psychology before being promoted unless we were given the opportunity to study the subject and know something about what was going to be asked. William Spady has suggested that few if any schools offer courses in "life skills" yet the MCT movement would prohibit the granting of a diploma until a test in "life skills" was passed. Gordon Cawelti, in looking at school skills testing for graduation, cautions that we may seriously narrow our curriculum in preparing students to pass such a MCT when we actually need to broaden our curriculum further to include some relevant "basics". Professor Hubben at the University of Colorado has also noted the possible trivialization of the curriculum in Oregon with the state narrowing its MCT from ten objectives to three for 1978.

Others have looked at the MCT as an opportunity to reform the basic curriculum and make it more responsive to the needs of the community. Such a view would lead to a long period of planning, phase-in, and community involvement. Teachers would undoubtedly teach differently knowing that all of the students would need to pass an examination before graduation. While such changes would not necessarily hold teachers accountable, the data would be available for all to see.

Phase-in time is the time between when the requirement to pass a MCT is instituted and the actual test given. To deny a diploma to a senior this year because he cannot pass a MCT given this year seems unfair which indeed it is. The phase-in time is much too short. More reasonable would be to require the passing of a MCT for graduation for those students now entering high school. Fairer still would be to make the requirement mandatory for those students now entering junior high.

There are a few problems created when MCT data is used to hold teachers accountable for the performance of their students. One problem stems from the curriculum that a given teacher teaches. Do all the teachers of the senior who failed get criticized? Or just the teachers of English and Mathematics? And if the test is one of "life skills" that no one taught who then is held to be accountable? For those who fail a school skills test in Grade 9, are the English and mathematics teachers held accountable? Who then would want to teach those subjects? Or do we give a differential for teaching those high-risk subjects. Surely there must be something wrong with the teacher who consistently has children who fail the MCT, isn't there? Or is it that such a teacher is "new" and gets all of the kids with low ability? Or for some other reason, perhaps because the teacher works well with such "failures"? The kind of MCT and the level are highly important factors in holding anyone accountable for the results, no matter how "clear" the data. What is clear is that we are passing the accountability for failure on to the child.

Finally there are the legal problems that may well ensue from a MCT program, not the least of which have to do with resegregation as mentioned above. There may well be suits from those who fail the MCT claiming that they were not adequately prepared by the school system to pass such an examination. There may be suits by those who pass the MCT but are denied diploma on other

substantial grounds claiming that the passing of the exam was evidence of a successful completion of public high school. Merle McClung from the Center for Law and Education writing in the February, 1978 issue of the Phi Delta Kappan said that a MCT that measures adult life role skills that were never taught in school and then used as a basis for denying a diploma is arguably so arbitrary as to violate due process of law. If that means that all of the MCTs will have to be school skill type tests, then perhaps we have been there all along.

IV. The CTBS Testing Program

Beginning with school year 1976-77 Springfield Schools switched to the CTBS as its instrument to test all of the students in Grades 4, 6, and 9 in a number of school skills. In addition, a short ability test was also given so that some expected achievement measure could be derived to compare the child's actual achievement. The test was given to 1993 ninth graders that first year. A total of 92 children, comprising 4.6% of those tested scored at the fifth percentile or lower. Of those 92, 69 had significantly lower achievement than was expected. There were 69 underachievers. But there were 24 who did not score lower than was expected and still scored below the sixth percentile.

Let's be clear on this one point. The CTBS was NOT constructed as a MCT of school skills. That was not its intended use nor has it been used in that capacity. Nevertheless, it may not be too far fetched to say that those children who score in the fifth percentile or lower are very high risk children for failing a MCT. And if a capacity-type MCT is developed for diagnostic purposes for use in Grade 9, those children identified as not possessing the minimum school skills necessary for competent functioning as an adult may very well be the same children that have scored so low on the CTBS. It seems illogical that an entirely different group of children would be identified on some MCT as potential failures and not this identified group of low scorers on the

CTBS.

If that is so, then the 69 "underachievers" need to be motivated, instructed, remediated, or whatever to lift their performance on some subsequent testing above the minimum necessary for graduation. But what of the 24 who were not underachievers? They are not underachievers. They have achieved as much as was expected from their ability. Do we deny diplomas to those who CAN NOT, let me stress . . . CAN NOT pass some MCT? Do we give diplomas stamped, "Diploma to a student with special qualifications" or some such wording?

And the problem is not going away. In 1977-78 the number of those scoring in the fifth percentile or lower rose to 116 (5.8%) with 81 having significantly lower scores than expected and 35 scoring expectedly low. The population in our schools gives no indication that the number of students scoring at the extreme low end of the scale will decrease.

The point is that we are already identifying a reasonably large number of ninth grade students who are either underachievers or of low academic skill. We do not need another instrument to identify those same students. What we need are perhaps new and creative ways to serve those children better, to provide experiences that will enable them to be fulfilled to whatever degree possible. Not granting them a diploma, per se, does not seem to be terribly helpful.

One last point here. There is some evidence that those students who have been called underachievers are those students who, for a number of reasons, do not do well in testing situations. They freeze up or become filled with anxiety to such a degree that their test performance is not a true picture of their capabilities. Again, adding another test to the additional requirements does not seem to be helpful.

V. Final Remarks

As you may have sensed from the remarks that I have made I am not in favor of a MCT whether mandated federally, but the state, or even locally.

I would support the conclusions of Professor Decker Walker of Stanford who suggested that we all can support the basic goal of doing those things that will help children to attain those skills that they need to function effectively and competently as adults. But we should also oppose the doing of those things which currently or ultimately undermine their basic humaneness. We all need to set standards, and it is not standard setting which is at the root of the discussion. The debate is centered around the evaluation of those to whom the standard is applied. We need to seriously debate the pros and cons of those definitions, implications, and consequences before taking some drastic action. Let all of us agree to work together to find answers to these pressing issues.